

ABSTRACT OF THE INVENTION

A solid polymer electrolyte composite for an electrochemical reaction apparatus that possesses satisfactory ion conduction properties and has excellent mechanical strength and heat resistance, is provided. the solid

5 polymer electrolyte composite is characterized in that a solid polymer electrolyte is contained in the continuous pores of an expanded porous polytetrafluoroethylene sheet which has continuous pores and in which the inner surfaces defining the pores are covered with a functional material such as a metal oxide. An electrochemical reaction apparatus containing an electrolyte,

10 wherein said electrochemical reaction apparatus is characterized in that the aforementioned solid polymer electrolyte composite is used as this electrolyte is also provided.